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MHC nucleic acid, which subsequence encodes a polypeptide comprising a peptide of the invention, as described above; amplifying the nucleic acid; and, detecting the amplified nucleic acid. In alternative embodiments, the MHC gene is HLA-DR 10 and the subsequence encodes a peptide wherein R₁ is Gln, Lys, or Arg; R₂ is Arg; R₃ is Arg; R₄ is Ala; R₅ is Ala; R₆ is Val; R₇ is Asp; R₈ is Thr; R₉ is Tyr; R₁₀ is Cys; R₁₁ is Arg; R₁₂ is His; R₁₃ is Asn; R₁₄ is Tyr; R₁₅ is Gly, and R₁₆ is Val (SEQ ID NO:2).

Please replace the paragraph beginning at page 3, line 22, with the following:

——The invention further provides a kit for detecting a nucleic acid in a biological sample, wherein the nucleic acid encodes a peptide capable of specifically binding to a Lym-1 antibody. The kit comprises an oligonucleotide primer pair capable of amplifying a subsequence of an MHC gene or gene product, which subsequence encodes a polypeptide comprising a peptide of the invention. In alternative embodiments, the MHC gene can be HLA-DR 10; and, the peptide can comprise a structure wherein R₁ is Gln, Lys, or Arg; R₂ is Arg; R₃ is Arg; R₄ is Ala; R₅ is Ala; R₆ is Val; R₇ is Asp; R₈ is Thr; R₉ is Tyr; R₁₀ is Cys; R₁₁ is Arg; R₁₂ is His; R₁₃ is Asn; R₁₄ is Tyr; R₁₅ is Gly, and R₁₆ is Val (SEQ ID NO:2).

Please replace the paragraph beginning at page 4, line 1, with the following:

——The invention also provides a method for detecting an antibody reactive with a non-Hodgkin's B cell lymphoma (B-NHL) cell. The method comprises contacting a sample, which can be a biological sample, with a composition of the invention under immunologically reactive conditions, and then detecting whether an antibody has specifically bound to the composition. In one embodiment, the composition comprises a peptide having a structure wherein R₁ is Gln, Lys, or Arg; R₂ is Arg; R₃ is Arg; R₄ is Ala; R₅ is Ala; R₆ is Val; R₇ is Asp; R₈ is Thr; R₉ is Tyr; R₁₀ is Cys; R₁₁ is Arg; R₁₂ is His; R₁₃ is Asn; R₁₄ is Tyr; R₁₅ is Gly, and R₁₆ is Val (SEQ ID NO:2). In various embodiments of

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this method, the antibody is generated by a recombinant nucleic acid library, the recombinant nucleic acid is a phage display library, and the composition is fixed to a solid surface.

Please replace the paragraph beginning at page 4, line 11, with the following:

The invention further provides a method for generating an antibody reactive with a non-Hodgkin's B cell lymphoma (B-NHL) cell. The method comprises administering an immunogenically effective amount of a composition of the invention to a mammal. The composition can comprise a peptide having a structure wherein R₁ is Gln, Lys, or Arg; R₂ is Arg; R₃ is Arg; R₄ is Ala; R₅ is Ala; R₆ is Val; R₇ is Asp; R₈ is Thr; R₉ is Tyr; R₁₀ is Cys; R₁₁ is Arg; R₁₂ is His; R₁₃ is Asn; R₁₄ is Tyr; R₁₅ is Gly, and R₁₆ is Val (SEQ ID NO:2). The B-NHL cell can be a B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (B-CCL/SLL) cell, a lymphoplasmacytoid lymphoma (LPL) cell, a follicular lymphoma (FL) cell, a mucosa-associated lymphoid tissue lymphoma (MALTL) cell, a splenic lymphoma with villous lymphocytes (SLVL) cell and a mantle cell lymphoma cell.

Please replace the paragraph beginning at page 4, line 21, with the following:

The invention provides an immunogenic composition capable of eliciting an immunogenic response directed to a polypeptide epitope, wherein the epitope comprises an amino acid sequence having a structure comprising $R_1 - R_2 - R_3 - R_4 - R_5 - R_6 - R_7 - R_8 - R_9 - R_{10} - R_{11} - R_{12} - R_{13} - R_{14} - R_{15} - R_{16}$, wherein R_1 is Gln, Lys, or Arg; R_2 is Arg; R_3 and R_4 are members independently selected from the group consisting of all amino acids; R_5 is Ala, Glu, Asp, Val, Leu or Ile; R_6 and R_7 are members independently selected from the group consisting of all amino acids; R_8 is Thr; R_9 , R_{10} , R_{11} , R_{12} , R_{13} , R_{14} , and R_{15} are members independently selected from the group consisting of all amino acids; and, R_{16} is Val. In one embodiment, the epitope comprises a sequence wherein R_1

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is Gln, Lys, or Arg; R_2 is Arg; R_3 is Arg; R_4 is Ala; R_5 is Ala; R_6 is Val; R_7 is Asp; R_8 is Thr; R_9 is Tyr; R_{10} is Cys; R_{11} is Arg; R_{12} is His; R_{13} is Asn; R_{14} is Tyr; R_{15} is Gly, and R_{16} is Val (SEQ ID NO:2). The immunogenic response can generate antibodies (i.e., a humoral response) specific for the polypeptide epitope. Alternatively, the immunogenic response can generate an epitope specific cellular response.

Please replace the paragraph beginning at page 5, line 1, with the following:

The invention further provides a method of inducing an immunogenic response directed to a polypeptide epitope, comprising administering an immunogenically effective amount of a composition comprising a polypeptide epitope to a mammal, wherein the epitope comprises an amino acid sequence having a structure comprising $R_1 - R_2 - R_3 - R_4 - R_5 - R_6 - R_7 - R_8 - R_9 - R_{10} - R_{11} - R_{12} - R_{13} - R_{14} - R_{15} - R_{16}$, wherein R₁ is Gln, Lys, or Arg; R₂ is Arg; R₃ and R₄ are members independently selected from the group consisting of all amino acids; R5 is Ala, Glu, Asp, Val, Leu or Ile; R6 and R₇ are members independently selected from the group consisting of all amino acids; R₈ is Thr; R₉, R₁₀, R₁₁, R₁₂, R₁₃, R₁₄, and R₁₅ are members independently selected from the group consisting of all amino acids; and, R₁₆ is Val. In one embodiment, the epitope comprises an amino acid sequence having a structure wherein R₁ is Gln, Lys, or Arg; R₂ is Arg; R₃ is Arg; R₄ is Ala; R₅ is Ala; R₆ is Val; R₇ is Asp; R₈ is Thr; R₉ is Tyr; R₁₀ is Cys; R_{11} is Arg; R_{12} is His; R_{13} is Asn; R_{14} is Tyr; R_{15} is Gly, and R_{16} is Val (SEQ ID NO:2). The immunogenic response can generate antibodies (i.e., a humoral response) specific for the polypeptide epitope. Alternatively, the immunogenic response can generate an epitope specific cellular response. In various embodiments, the method involves administering the immunogenic composition to a human, a mouse or a rabbit.

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Please replace the paragraph beginning at page 19, line 4, with the following:

-This invention has, for the first time, determined the epitope for the Lym-1 antibody on Class II DR10 polypeptides is R₁ - R₂ - R₃ - R₄ - R₅ - R₆ - R₇ - R₈ - $R_9 - R_{10} - R_{11} - R_{12} - R_{13} - R_{14} - R_{15} - R_{16}$, where R_1 is Gln, Lys, or Arg; R_2 is Arg; R_3 is Arg; R4 is Ala; R5 is Ala; R6 is Val; R7 is Asp; R8 is Thr; R9 is Tyr; R10 is Cys; R11 is Arg; R_{12} is His; R_{13} is Asn; R_{14} is Tyr; R_{15} is Gly, and R_{16} is Val, or, simply: (Gln, Lys, or Arg) - Arg - Arg - Ala - Ala - Val - Asp - Thr - Tyr - Cys - Arg - His - Asn - Tyr - Gly -Val (SEQ ID NO:2), which correspond to residues 70 to 85 on the DR10 polypeptide. Based on the secondary structure of DR molecules proposed by Brown (1993) supra, (see Fig. 1), in DR10, the valine at residue 85 in proximity to the arginine at residue 71 (because of the secondary structure induced by the intrachain disulfide bond) corresponds to residue R₁₆ and residue R₂, respectively, of the epitope of the invention. Accordingly, in one embodiment, the invention provides a polypeptide or peptide composition which, in addition to having the above-described amino acid sequence, has a secondary structure in the same orientation with respect to each other as in the native molecule (estimated by the teaching of, e.g., the DR structure proposed by Brown (1993) supra). One of skill can readily test whether (and to what degree, i.e., what with what affinity) a peptide with a particular secondary structure binds to Lym-1 antibody.

